

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-2. cancelled

3. (currently amended) A surgical instrument having a proximal end and a distal end, the surgical instrument comprising:

a handle at the proximal end, the handle including a grip portion;

a hollow elongate support member extending distally from the handle and having a distal end at the distal end of the surgical instrument;

a slide member having a proximal end, ~~and a distal end~~, a drive surface and a through-slot at the drive surface between the two ends, the through-slot extending in a proximal-distal direction and being spaced from distal end ~~located on the proximal side~~ of the hollow elongate support member;

a lever ~~pivally~~ connected to the handle at a pivotal connection, the lever including a lever grip portion on one side of the pivotal connection and an integral drive portion on the other side of the pivotal connection, at least part of the drive portion comprising an integral cam received in the through-slot in the slide member adjacent to the drive surface;

a surgical implement having a proximal end connected to the distal end of the slide member, an elongate portion extending through the hollow elongate support, and a distal end;

a spring to urge the slide member toward the proximal end of the surgical instrument;

wherein the slide member and elongate portion of the surgical implement are capable of being moved ~~reciprocally~~ in a linear ~~proximal~~-distal direction by pivoting the lever so that the integral cam of the lever pushes against the drive surface of the slide member; and

wherein the surgical instrument is free of any mechanical connection between the lever and the slide member;

the surgical instrument further comprising a housing around at least a portion of the slide member, wherein the elongate support member and surgical implement extend outward from the housing, and wherein the housing, slide member, elongate support member and surgical implement comprise a cartridge removable from the handle and lever.

4. (previously presented) The surgical instrument of claim 3 wherein the housing has a proximal opening aligned with the slide member, a channel extending distally from the proximal opening, and an entry slot in communication with the channel, wherein the elongate portion of the surgical implement and slide member can be assembled into a subassembly by connecting the elongate portion of the surgical implement to the slide member, and wherein the cartridge can be assembled by inserting the subassembly through the proximal opening in the housing, inserting the drive portion of the lever through the entry slot in the housing and into the through-slot in the slide member, and pushing the elongate portion of the surgical implement through the elongate support member.

5. (currently amended) A modular surgical instrument comprising an actuator module and a discrete tool module,

the actuator module comprising:

a handle comprising a grip portion and an integral support portion, the support portion having proximal and distal ends and a support surface between the proximal and distal ends, the handle being substantially open above the support surface; and

a lever pivotally connected to the support portion of the handle, the lever including a trigger portion and a drive portion, the trigger portion being longer than the drive portion, the drive portion extending through an opening in the support surface of the handle; and

the tool module comprising an assembly of a hollow housing, a discrete hollow elongate support member, a discrete surgical ~~implement~~instrument and a discrete slide member;

the hollow housing having proximal and distal ends and being sized and shaped to fit between the proximal and distal ends of the support portion of the handle;

the hollow elongate support member being fixed to the distal end of the housing, the hollow elongate support member having a proximal end within the housing and extending outwardly from the housing to a free distal end, the free distal end having an opening;

the hollow housing and hollow elongate support member defining an open passageway between them;

the surgical implement being capable of reciprocal motion in the proximal-distal direction relative to the hollow elongate support member, at least part of the surgical implement extending through the hollow elongate support member and out through the opening at the free distal end of the elongate support member, the surgical

implement having a proximal part extending past the proximal end of the hollow elongate support member into the housing; and

the slide member being operably connected to at least part of the surgical implement and being capable of reciprocal motion in the proximal-distal direction relative to the housing, the slide member having a drive surface within the housing; wherein the actuator module and tool module are capable of being assembled and disassembled so that at least one of the modules can be reused independent of the other module, and

wherein when the actuator module and tool module are assembled the drive portion of the lever engages the drive surface of the slide member so that the slide member and surgical implement can be moved in the distal direction by squeezing the trigger portion of the lever.

6. (original) The modular surgical instrument of claim 5 wherein the slide member has an elongate slot and the housing of the tool module has an opening aligned with the elongate slot so that the actuator module and tool module can be assembled by inserting the drive portion of the lever through the opening in the housing of the tool module and into the elongate slot in the slide member.

7. (original) The modular surgical instrument of claim 5 wherein the surgical implement comprises a pair of elongate substantially flexible distance references connected at one end to the slide member in the housing and extending out of the free distal end of the elongate support member.

8. (withdrawn) The modular surgical instrument of claim 7 wherein the free distal end of the elongate support member has substantially flat upper and lower surfaces and an interior wedge between the substantially flat upper and lower surfaces, the interior wedge diverging in the distal direction and defining two divergent passageways, and wherein one of the elongate substantially flexible distance references extends through one of the divergent passageways of the elongate support member and the other of the elongate substantially flexible distance references extends through the other of the divergent passageways of the elongate support member.

9. (currently amended) The modular surgical instrument of claim 5 wherein the surgical implement comprises a pair of elongate distance references connected at one end to the slide member in the housing and extending out of the free distal end of the elongate support member to free ends, the elongate distance references being made of a shape memory material and the free ends being having at least one of the following unstressed shapes:
~~substantially straight and parallel; and divergent at the free ends.~~

10. (withdrawn) The modular surgical instrument of claim 5 wherein the surgical implement comprises an elongate rod and a tissue manipulator, wherein the elongate rod is received in the elongate support member and connected at one end to the slide member and at the other end to the tissue manipulator.

11. (withdrawn) The modular surgical instrument of claim 5 wherein the surgical implement comprises a cannula, wherein the cannula is received in the elongate support member and connected at one end to the slide member.

12. (currently amended) The modular surgical instrument of claim 5 wherein the ~~instrument comprises a kit including the~~ actuator module and the tool module define as separate elements of a kit.

13. (withdrawn) The modular surgical instrument of claim 12 wherein the kit includes a plurality of tool modules.

14. (original) The modular surgical instrument of claim 5 wherein the handle is sized and shaped to support the housing of the tool module and to limit relative proximal-distal movement between the housing of the tool module and the handle.

15. (original) The modular surgical instrument of claim 5 wherein at least one of the actuator module and tool module includes a spring for urging the slide member toward the proximal end of the housing.

16. (currently amended) A disposable surgical tool module for use with a separate actuator module, the surgical tool module comprising:

a hollow housing having proximal and distal ends and a channel extending between the ends:

a discrete hollow elongate support member at the distal end of the housing, the hollow elongate support member having a proximal end received within the housing, the hollow elongate support member extending outwardly from the housing to a free distal end, the free distal end having an opening, the hollow elongate support member having an axial length between the proximal and distal ends, a majority of the axial length of the hollow elongate support member being exposed outside of the housing;

a surgical implement ~~capable of reciprocal motion in the proximal distal direction, the surgical implement~~ having a proximal end within the housing, at least part of the surgical implement extending through the hollow elongate support member and out through the opening at the free distal end of the hollow elongate support member, the hollow elongate support member being sized and shaped to allow linear movement of the surgical implement in the proximal and distal direction; and

a slide member held within the housing and operably connected to the proximal end of the surgical implement between the proximal end of the housing and the proximal end of the hollow elongate support member, the channel of the housing being sized and shaped to allow linear movement of the slide member being capable of reciprocal motion in the proximal and distal directions in the channel, the slide member having a slot within the housing, the slot having an axial dimension and a transverse dimension, the axial dimension being greater than the transverse dimension;

the housing having an opening aligned with the slot of the slide member, the opening in the housing having an axial dimension greater than the axial dimension of the slot;

the tool module being free from any structure for moving the slide member in the distal direction.

17. (original) The disposable surgical tool module of claim 16 wherein the surgical tool module comprises part of a kit, the kit further including an actuator module including a handle for receiving and supporting the housing of the surgical tool module and a lever pivotally attached to the handle.

18. (withdrawn) The disposable surgical tool module of claim 16 wherein the surgical implement comprises at least one of the following:

a pair of elongate substantially flexible distance references connected at one end to the slide member in the housing and extending out of the free distal end of the elongate support member;

an elongate rod and a tissue manipulator, wherein the elongate rod is received in the elongate support member and connected at one end to the slide member and at the other end to the tissue manipulator; and

a cannula connected at one end to the slide member.

19. (original) The disposable surgical tool module of claim 16 further comprising a spring in the housing for urging the slide member toward the proximal end of the housing.

20. (withdrawn) The disposable surgical tool module of claim 16 wherein the free distal end of the elongate support member has substantially flat upper and lower surfaces and an interior wedge between the substantially flat upper and lower surfaces, the interior wedge diverging in the distal direction and defining two divergent passageways, and wherein the

surgical implement comprises a pair of elongate substantially flexible distance references, wherein each distance reference extends through one of the divergent passageways of the elongate support member.

21. (withdrawn) The disposable surgical tool module of claim 16 wherein the surgical implement comprises a pair of elongate distance references connected at one end to the slide member in the housing and extending out of the free distal end of the elongate support member to free ends, the elongate distance references being made of a shape memory material and having at least one of the following unstressed shapes: substantially straight and parallel; and divergent at the free ends.

22-45 cancelled